

IFN β G162C-Ig direct fusion construct open reading frame

1 ATGCCCTGGAAAGATGGTGTGATCCCTGGCCTCAAATACTTTGGATAATGTTTGCA 60
 M P G K M V V I L G A S N I L W I M F A

61 GCTTCCTCAAGCCATGAGCTACAACCTGCTTGGATTCTACAAAGGAACATTTCAG 120
 A S Q A M S Y N L L G F L Q R S S N F Q

121 TGTCAAGAACGCTCCTGTGGCAATTGAAATGGGAGGCTTGAATACTGGCTCAAGGACAGGATG 180
 C Q K L L W Q L N G R L E Y C L K D R M

181 AACTTGTGACATCCCTGAGGAGATTAAAGCAGCTGCAGCAGTTCCAGAAGGGACGCCGCA 240
 N F D I P E E I K Q L Q F Q K E D A A

241 TTGACCATCTATGAGATGCTCCAGAACATCTTTGCTTTCAGACAAGATTCACTCTAGC 300
 L T I Y E M L Q N I F A I F R Q D S S S

301 ACTGGCTGGAATGAGACTTATGTTGAGAACCTCCTGGCTAATGTCATCATCAGATAAAC 360
 T G W N E T I V E N L L A N V Y H Q I N

361 CATCTGAAAGACAGTCCTGGAAAGAAAACCTGGAGAAAGAAAGATTCACCAAGGGAAACTC 420
 H L R T V L E E K L E K E D F T R G K L

421 ATGAGCAGTCCTGACCTGAAAGATATTATGGAGGGATTCTGCATTACCTGAAGGCCLAG 480
 M S S L H L K R Y Y G R I L H Y L K A K

FIG. 1.A

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481 GAGTACAGTCACITGGCCTGGACCATAGTCAGACTGGAATCTAAGGAACTTTACTTC 540
 E Y S H C A W T I V R V E I L R N F Y F

541 ATTAACAGACTTACATGTAACTTCCGAAACGTCGACAAMACTCACACATGCCAACCGTGC 600
 I N R L T C Y L R N V D K T H T C P P C

601 CCAGGACCTGAACCTCCTGGGGGACCGTCAAGTCCTTCCTCTTCCCCCAAACCCAAGGAC 660
 P A P E L L G G P S V F L F P P K P K D

661 ACCCCTCAGTACCTCCGGACCCCTGAAGGTCAACATGGCTGGCTGGTGGACGTGAGCCACGAA 720
 T L M I S R T P E V T C V V D V S H E

721 GACCCTCTGAGGTCAAGTTCACCTGGTACGTGGTGGACGGGTGGTGCATAATGCCAAGGACA 780
 D P E V K F N W Y V D G V E V H N A K T

781 AAGCCGGGGAGGCAAGTACAAACAGCACCGTACCTGGTGGTGGTCAAGGTCTCACCGTCTTG 840
 K P R E E Q Y N S T Y R V V S V L T V L

841 CACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAGGTCTCAAAAGCCCTCCCA 900
 H Q D W L N G K E Y K C K V S N K A L P

901 GCCCCCCATCGAGAAAACCATTCTCAAAGCCAAGGGCAAGGGAGAACACAGGTGTAC 960
 A P I E K T I S K A K G Q P R E P Q V V Y

FIG. 1 B.

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961 ACCCTGCCCATCCGGATGAGCTGACCAAGAACCGGTCAGGCTGACCTGCCTGGTC 1020
T L P P S R D E L T K N Q V S L T C L V
1021 AAAGGCTTCTATCCAGGACATGCCCGTGGAGTGGAGAGGAAATGGCAGCCGGAGAAC 1080
K G F Y P S D I A V E W E S N G Q P E N
1081 AACTACAAGACCCGCCTCCCGTGGACTCCGACGGCTCCCTCTACAGCAAG 1140
N Y K T P P V L D S D G S F F L Y S K
1141 CTCACCGTGGACAAGAGCCGGTGGCAGGGAACGTTCTCATGCTCCGTGATGCCAT 1200
L T V D K S R W Q Q G N V F S C S V M H
1201 GAGGCTCTGCACAACCACTACACGGAGAAGAGCCCTCCCTGGTCTCCGGAAATGA 1257
E A L H N H Y T Q R S L S P G K *

FIG. 1 C

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TPN β G162C-Ig fusion G4S linker construct open reading frame

1 ATGCCCTGGAAAGATGGTCGTGATCCTTGAGGCCTCAAATAACTTGGATAATGGTTGCA 60
 M P G K M V V I L G A S N I L W I M F A

61 GCTTCTCAAGCCATGGCTTACAACTTGCTTGGATTCTACAAAAGCAGCAATTTCAG 120
 A S Q A M S Y N L L G F L Q R S S N F Q

121 TGTCAAGAACCTCCTGGCAATATGAAATGGGAGGCTGTGAATACTGCCTCAAGGACAGGATG 180
 C Q K L L W Q L N G R L E Y C L K D R M

181 AACTTTGACATCCCTGAGGAGATTAAGCAGCTGCAGCAGTTCCAGAAGGAGGACGCCGCA 240
 N F D I P E E I K Q L Q F Q K E D A A

241 TTGACCACATCTATGAGATGCTCCAGAACATCTTGCCTATTTCAGACAAGATTCATCTAGC 300
 L T I Y E M L Q N I F A I F R Q D S S S

301 ACTGGCTGGAAATGAGACTATTGGTGGAAACCTCCTGGCTAATGCTCATCAGATAAAC 360
 T G W N E T I V E N L L A N V Y H Q I N

361 CATCTGAAGACAGTCTGGAAAGAAAAACTGGAGAAAGATTTCACCAAGGGGAAACTC 420
 H L K T V L E E K L E K E D F T R G K L

FIG. 2A

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421 ATGAGCAGTCTGCACCTGAAAGATATTATGGGGATTCTGCATTACCTGAAGGCCAAG 480
M S S L H L K R Y Y G R I L H Y L K A K

481 GAGTACAGTCACGTGCTGGACCATACTGAGTGGAAATCCTAAGGAACTTTACTTC 540
E Y S H C A W T I V R V E I L R N F Y F

541 ATTAAACAGACTTACATGTACCTCGAAACGGCCGGTGGCAAGCGTGACAAAGTCAC 600
I N R L T C Y L R N G G G S V D K T H

601 ACATGGCCACCGTGCCAGCACCTGAAACTCTGGGGGACCGTCAAGTCCTCTCCCC 660
T C P P C P A P E L L G G P S V F L F P

661 CCAAACCCAAGGACACCCCTCATGATCTCCGGACCCCTGAGGTACATGGGGGGGG 720
P K P K D T L M I S R T P E V T C V V V

721 GACGTGAGGCCACGAAGAACCCCTGAGGTCAAGTTCAACTGGTACCTGGACGGGTGGAGGGTG 780
D V S H E D P E V K F N W Y V D G V E V

781 CATAATGCCAAGACAAAGCCGGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 840
H N A K T K P R E E Q Y N S T Y R V V S

841 GTCCTCACCGTCCCTGCACCCAGGACTGGCTGAATGGCAAGGAGTACAAGTGGCAAGGTCTCC 900
V L T V L H Q D W L N G K E Y K C K V S

901 AACAAAGCCCTCCAGCCCCATCCAGAAAAACCATCTCCAAAGCCAAAGGGCAGCCCGA 960
N K A L P A P I E K T I S K A R G Q P R

FIG. 2B

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961 GAAACCACAGGTGTACACCCATGCCCATCCCCGATGAGCTGACCAAGAACCGGTCAAGC 1020
E P Q V Y T L P P S R D E L T K N Q V S

1021 CTGACCTGGCTTGGTCAGGCTTCTATCCAGGACATGCCGTGGAGTGGAGGCAAT 1080
L T C L V K G F Y P S D I A V E W E S N

1081 GGGCAGCCGGAGAACAACTACAAAGACCAAGCCCTCCGTTGGACTCCGACGGCTCCCTTC 1140
G Q P E N N Y K T P V L D S D G S F

1141 TTCCCTCACAGCAAGCTCACCGTGGACAAAGAGCCAGGTGGCAGGGAAACGTCCTCTCA 1200
F L Y S K L T V D K S R W Q Q G N V F S

1201 TGCTCCGTTGATGGCATGGCTCTGGCACAACTACACGGCAGAAAGAGCCTCTCCCTCT 1260
C S V M H E A L H N H Y T Q K S L S L S

1261 CCCGGAAATGA 1272
P G K *

FIG. 2 C

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FIG. 3

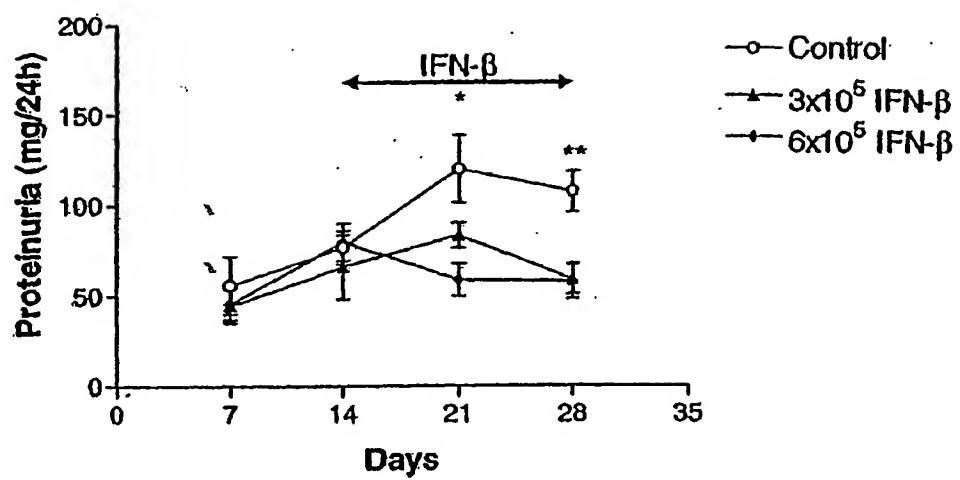


FIG. 4

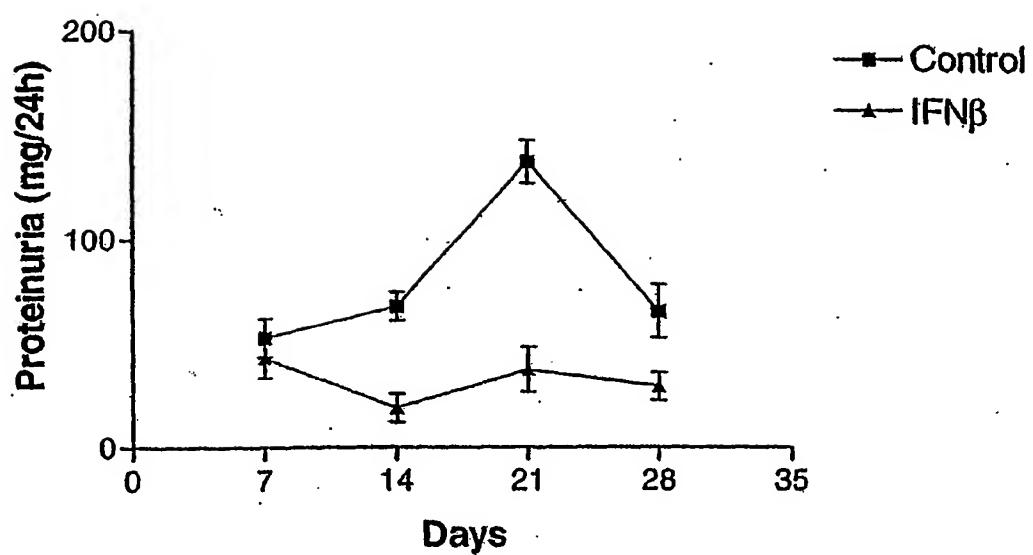


FIG. 5

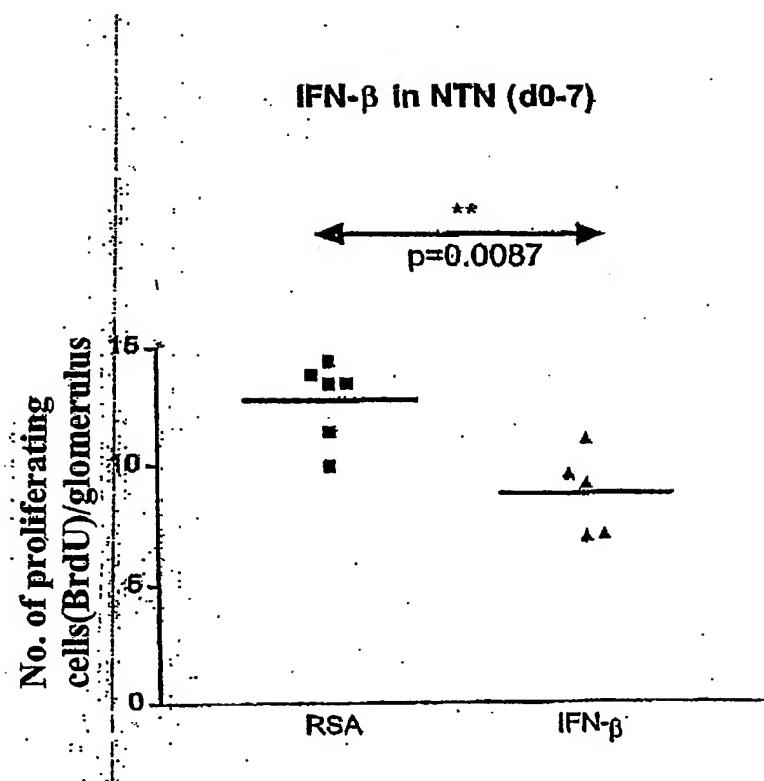


FIG. 6

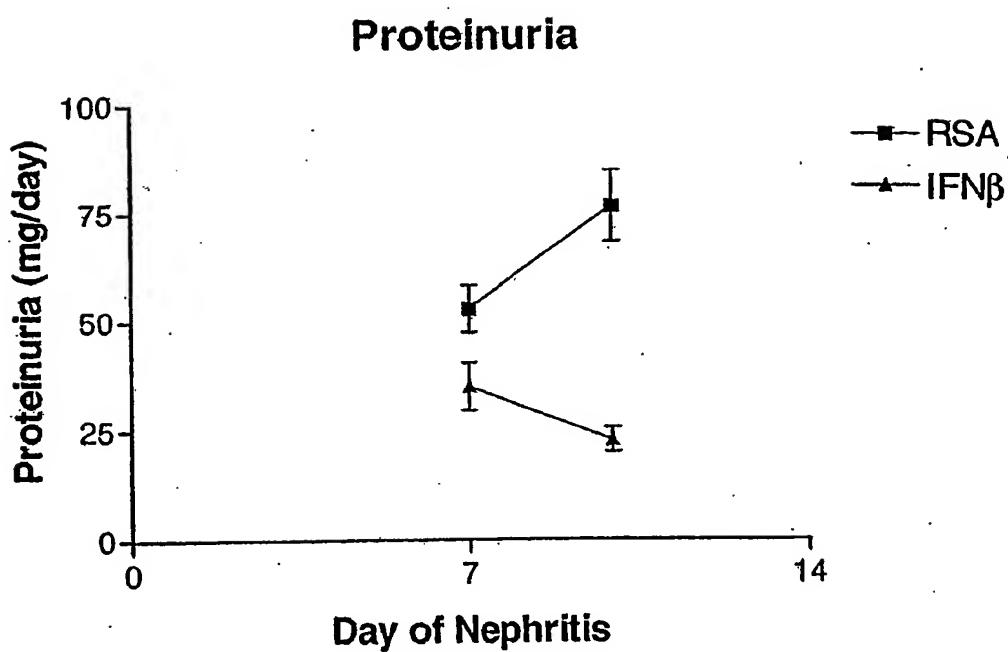


FIG. 7

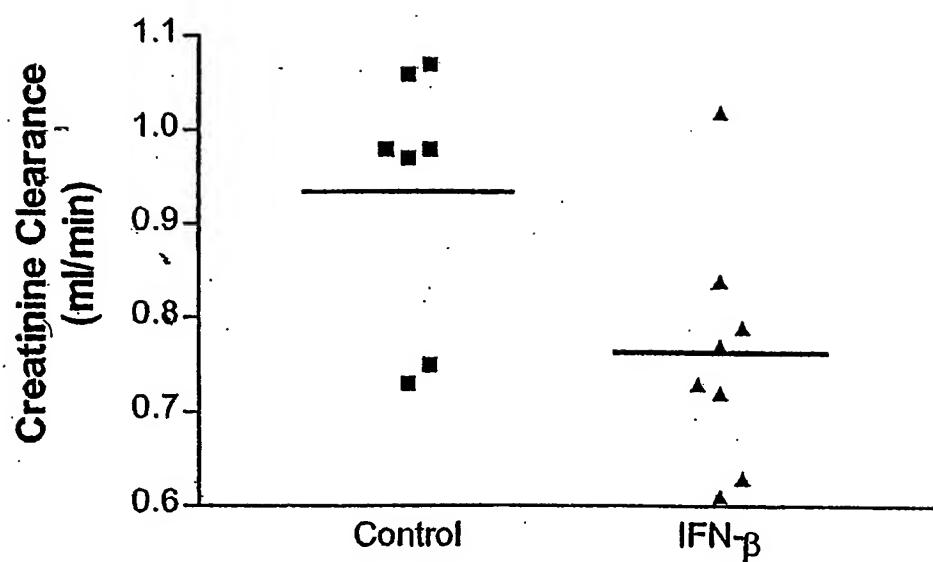


FIG. 8

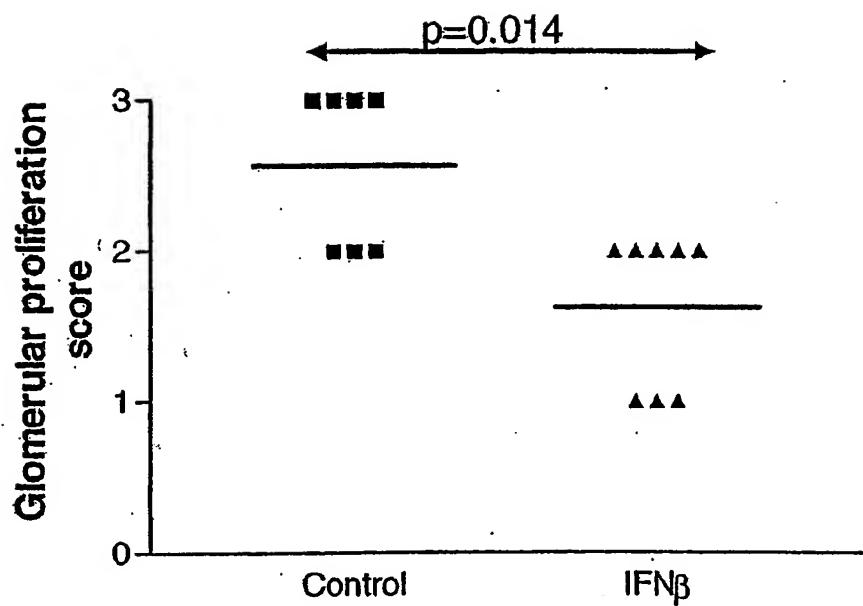
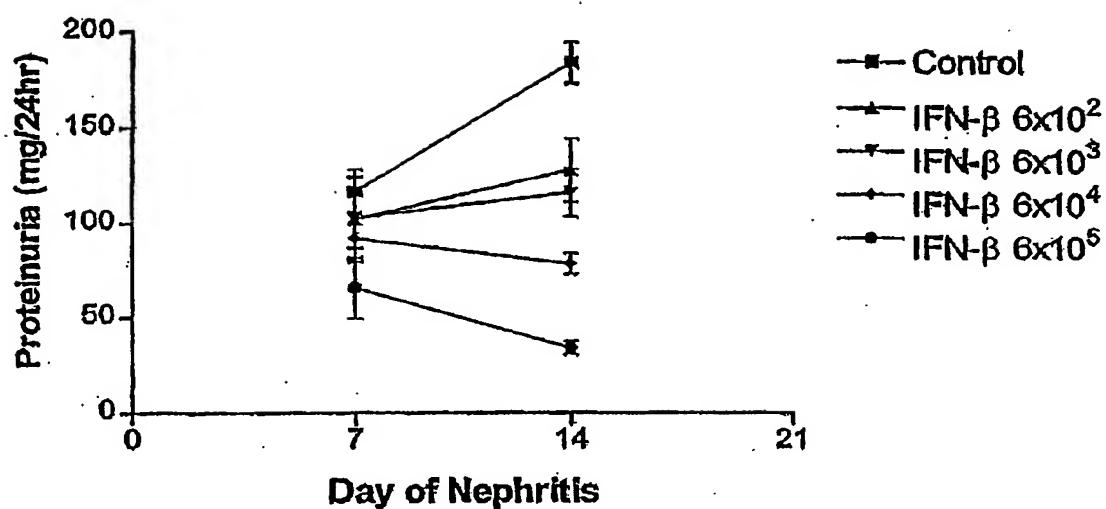


FIG. 9



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